

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/051458

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01L23/538 H01L25/16

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 - H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 161 124 A (ALPS ELECTRIC CO., LTD) 5 December 2001 (2001-12-05) paragraphs '0021!, '0026! - '0030! paragraphs '0033! - '0038! figures 2,4,8-10	1-7
Y	US 6 359 331 B1 (RINEHART LAWRENCE EDWARD ET AL) 19 March 2002 (2002-03-19) column 3, line 15 - column 4, line 49 claims 1,3,4 figures 4,5c  ----- -/-	1-10

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
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Date of the actual completion of the international search

15 July 2005

Date of mailing of the international search report

27/07/2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 03/030247 A (SIEMENS AKTIENGESELLSCHAFT; HAESE, KERSTIN; AMIGUES, LAURENCE; SCHWARZ) 10 April 2003 (2003-04-10) page 2, line 30 - page 13, line 20 claims 1-3,8,10-12 figures 1,2	1-10
A	US 2002/034088 A1 (PARKHILL SCOTT ET AL) 21 March 2002 (2002-03-21) paragraphs '0035!, '0036! paragraphs '0040! - '0042! paragraphs '0047! - '0049! claims 1,5,8,9,13,17,19 figures 3,5,10-12	1,2,6,7
A	US 5 559 374 A (OHTA ET AL) 24 September 1996 (1996-09-24) column 4, line 22 - column 6, line 55 figures 8-12	1,2,6,7
A	US 6 365 498 B1 (CHU TSUNG-YAO ET AL) 2 April 2002 (2002-04-02) the whole document	1,2,4, 8-10